

## REMARKS

In the Examiner's Answer, the Examiner has rejected claims 7-27. More specifically:

- Claims 7-27 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter;
- Claims 7-12, 18 and 20-27 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication No. 2003/0208754 to Sridhar et al. ("Sridhar");
- Claims 13-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sridhar in view of U.S. Patent No. 6,684,195 to Deaton et al. ("Deaton"); and
- Claim 19 was rejected under 35 U.S.C. §103(a) as being unpatentable over Sridhar in view of Official Notice.

Claims 18, 20 and 23 have been amended. No new matter has been added as a result of these amendments. Upon entry of these amendments, claims 7-27 remain pending. For the reasons set forth hereinbelow, Applicants request that the §§101, 102(e) and 103(a) rejections associated with the pending claims be withdrawn.

### Rejections Under 35 U.S.C. §101

Claims 7-27 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Specifically, these claims were rejected as not being tied to another statutory class of invention and not transforming the underlying subject matter.

Claims 18, 20 and 23 have been amended to specify that certain limitations are performed by a computing device. As such, these claims, and the claims that depend therefrom are tied to a particular apparatus, and therefore contain patentable subject matter under §101. In addition, claims 18, 20 and 23 have been amended to include limitations directed to distributing offers to customers. As such, independent claims 18, 20 and 23, and the claims that depend therefrom,

transform the underlying subject matter. Accordingly, Applicants request that the §101 rejections associated with claims 7-27 be withdrawn.

**Rejections Under 35 U.S.C. §102(e)**

Claim 23

Independent claim 23 is not anticipated by U.S. Patent Application Publication No. 2003/0208754 to *Sridhar* because *Sridhar* fails to disclose each and every element of claim 23. *See* MPEP §2131 (stating that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in the single prior art reference). More particularly, *Sridhar* fails to disclose at least the following elements required by claim 23:

- generating a plurality of scores for said plurality of customers, each said score being associated with one said customer and with one said offer, and each said score measuring a probability that the associated customer will make a purchase in accordance with the associated offer; and
- identifying the highest score in said plurality of scores and identifying the customer substantially scoring the highest score.

*Sridhar* discloses a system and method for providing a subscriber with relevant advertisements based on the subscriber's purchase prediction for various products and information such as location, ongoing events and personal events (*See Sridhar* ¶0024). The purchase prediction is determined for individual subscribers as illustrated by the specification language from *Sridhar* which provides “[t]he objective for the advertisement system is two folds [sic] one to attract the subscriber to a relevant event, which is close to him, and second to draw his attention to a product which has [sic] largest purchase prediction **for him**” (*Sridhar* ¶0156, emphasis added).

Unlike the methods of *Sridhar*, the method of claim 23 is directed to generating a plurality of scores for a plurality of customers and identifying the highest score of this plurality

of scores to determine the best promotions to distribute to each customer. The claimed system distributes an offer to the customer having the highest probability of purchasing the promoted product. *Sridhar* cannot determine which customer has the highest probability of purchasing a product. Rather, the system in *Sridhar* analyzes offers for a single customer in isolation (i.e., only one customer is considered at a time). As such, the system in *Sridhar* distributes what it determines to be the best offer for the considered customer, regardless of whether that offer would have a higher likelihood of being accepted by another customer.

Moreover, *Sridhar* does not disclose “identifying the highest score in said plurality of scores and identifying the customer substantially scoring said highest score” as required by claim 23. “Said plurality of scores” derives its antecedent basis from the limitation of claim 23 which recites “generating a plurality of scores for said plurality of customers, each said score being associated with one said customer and with one said offer, and each said score measuring a probability that the associated customer will make a purchase in accordance with the associated offer.” As such, “identifying the highest score in said plurality of scores” refers to identifying the highest score in the plurality of scores that were generated for the plurality of customers. The *Sridhar* system selects an advertisement having the highest score out of scores for a single customer, not an offer having the highest score out of scores for a plurality of customers. This is because the *Sridhar* system never generates a plurality of scores for more than one customer at a time and, as such, is incapable of identifying the highest score in the plurality of scores generated for a plurality of customers as required by claim 23.

As such, the system of *Sridhar* distributes advertisements to subscribers who do not have the highest probability of purchasing the product being promoted because the methods of *Sridhar* only determine a purchase prediction for an individual subscriber. This is especially true when

constraints are placed on the number of advertisements that may be distributed or the number of advertisements a specific customer may receive. In other words, an advertisement having the highest probability of being selected by one customer may have an even higher probability of being selected by a different customer. The claimed methods analyze a plurality of probabilities for a plurality of customers and, as such, can target advertisements to particular customers having the highest probability of purchasing the product being promoted.

Figure 3 from the present application illustrates this point. Figure 3 depicts an exemplary plurality of scores generated according to the teachings of claim 23, and is reproduced below for comparison with the *Sridhar* system. Applicant's claimed system generates a plurality of scores for a plurality of customers as is illustrated by Figure 3. In contrast, the Sridhar Chart depicts a score matrix as it would be generated based on the operation of the *Sridhar* methods and systems. As illustrated by the Sridhar Chart, the *Sridhar* system merely determines an offer based on probabilities of acceptance for an individual customer (in this example, customer-4). In other words, the *Sridhar* system is merely capable of populating one row of the score matrix depicted in Figure 3, whereas the claimed system is capable of populating the entire matrix because it generates scores for a plurality of customers, rather than a single customer.

OFFER PROBABILITY / SCORE				
	offer-1	offer-2	offer-3	offer-4
customer-1	0.006	0.002	0.004	0.009
customer-2	0.007	0.011	0.020	0.001
customer-3	0.009	0.001	0.003	0.002
customer-4	0.004	0.003	0.002	0.005

**FIG. 3**

OFFER PROBABILITY / SCORE				
	offer-1	offer-2	offer-3	offer-4
customer-4	0.004	0.003	0.002	0.005

**Sridhar Chart**

In light of the foregoing, *Sridhar* fails to disclose every element of claim 23, and, as such, does not render the present invention unpatentable under 35 U.S.C. §102(e). Claims 7-12 and 24-27 depend from claim 23 and thus contain all of the limitations of claim 23. Accordingly, Applicant requests that the §102(e) rejections associated with claims 7-12 and 23-27 be withdrawn.

**Claim 18**

Independent claim 18 is not anticipated by U.S. Patent Application Publication No. 2003/0208754 to *Sridhar* because *Sridhar* fails to disclose each and every element of claim 18. More particularly, *Sridhar* fails to disclose, among other things, at least the following element required by claim 18:

- “providing, for each combination of customer and promotional offer from said pluralities, a measure of the acceptance probability that the customer will accept the promotional offer....”

The Examiner asserts that this element of claim 18 is present in *Sridhar*, especially at paragraphs 0175-0201. As discussed above with respect to claims 23-27 and 7-12, however, *Sridhar* merely describes determining a purchase prediction for an individual subscriber. The claimed method, on the other hand, is directed to providing an acceptance probability to a

plurality of customers, and more specifically, to each combination of customer and offer from a plurality of customers and a plurality of offers.

Because the methods of Sridhar determine a purchase prediction for an individual subscriber, the system of *Sridhar* distributes advertisements to subscribers who do not have the highest probability of purchasing the product being promoted. This is especially true when constraints are placed on the number of advertisements that may be distributed or the number of advertisements a specific customer may receive. In other words, an advertisement having the highest probability of being selected by one customer may have an even higher probability of being selected by a different customer. In contrast, the claimed methods analyze a plurality of probabilities for a plurality of customers and, as such, can target advertisements to particular customers having the highest probability of purchasing the product being promoted.

Figure 3 is again illustrative of this point. The claimed method provides an acceptance probability for each customer/offer combination, and, as such, is able to populate the chart illustrated in Figure 3. *Sridhar*, as illustrated by the Sridhar Chart, is merely able to populate one row of Figure 3, since *Sridhar* only determines a purchase prediction for an individual subscriber.

		OFFER PROBABILITY / SCORE			
		offer-1	offer-2	offer-3	offer-4
customer-1	offer-1	0.006	0.002	0.004	0.009
	offer-2	0.007	0.011	0.02	0.001
customer-3	offer-1	0.009	0.001	0.003	0.002
customer-4	offer-1	0.004	0.003	0.002	0.005

**FIG. 3**

OFFER PROBABILITY / SCORE				
	offer-1	offer-2	offer-3	offer-4
customer-4	0.004	0.003	0.002	0.005

**Sridhar Chart**

For at least these reasons, *Sridhar* fails to disclose every element of claim 18, and, as such, does not render the present invention unpatentable under 35 U.S.C. §102(e). Accordingly, Applicant requests that the §102(e) rejection associated with claim 18 be withdrawn.

**Claim 20**

Independent claim 20 is not anticipated by U.S. Patent Application Publication No. 2003/0208754 to *Sridhar* because *Sridhar* fails to disclose each and every element of claim 20. More particularly, *Sridhar* fails to disclose, among other things, at least the following required element of claim 20:

- “selecting for distribution to each customer the offers associated with the highest estimated probability which satisfy one or more constraints, wherein one of the one or more constraints is a limitation on the quantity of promotional offers for a particular product that may be distributed in aggregate to all customers...”

The Examiner asserts that this element of claim 20 is present in *Sridhar* at paragraph 0175. As discussed above with respect to claims 23-27 and 7-12, however, the phrase “the highest estimated probability” has a different connotation in the claimed methods than it does in *Sridhar*. Because the methods of *Sridhar* only determine a purchase prediction for an individual subscriber, and this purchase prediction is selected independently of the purchase predictions of other subscribers, the system of *Sridhar* may distribute advertisements to subscribers who do not have the highest probability of purchasing the product being promoted. This is especially true

when constraints are placed on the number of advertisements that may be distributed or the number of advertisements a specific customer may receive. In other words, an advertisement having the highest probability of being selected by one customer may have an even higher probability of being selected by a different customer. The claimed methods analyze a plurality of probabilities for a plurality of customers and, as such, can target advertisements to particular customers having the highest probability of purchasing the product being promoted.

*Sridhar* fails to disclose every element of claim 20, and, as such, does not render the present invention unpatentable under 35 U.S.C. §102(e). Claims 21 and 22 depend from claim 20 and thus contains all of the limitations of claim 20. Accordingly, Applicant requests that the §102(e) rejections associated with claims 20-22 be withdrawn.

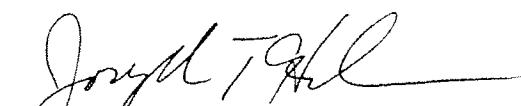
All of the new grounds of rejection have been properly traversed, accommodated or rendered moot. Applicant respectfully requests that prosecution be reopened under MPEP §1207.03(V)(A), and that the Examiner reconsider and withdraw all presently outstanding rejections. There being no other rejections, Applicant respectfully requests that the current application be allowed and passed to issue.

If the Examiner believes for any reason that personal communication will expedite prosecution of this application, I invite the Examiner to telephone me directly.

**AUTHORIZATION**

The Commissioner is hereby authorized to charge any additional fees which may be required for this Amendment and Response, or credit any overpayment, to deposit account no. 50-0436.

Respectfully submitted,  
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Date: February 5, 2009